FIG 1

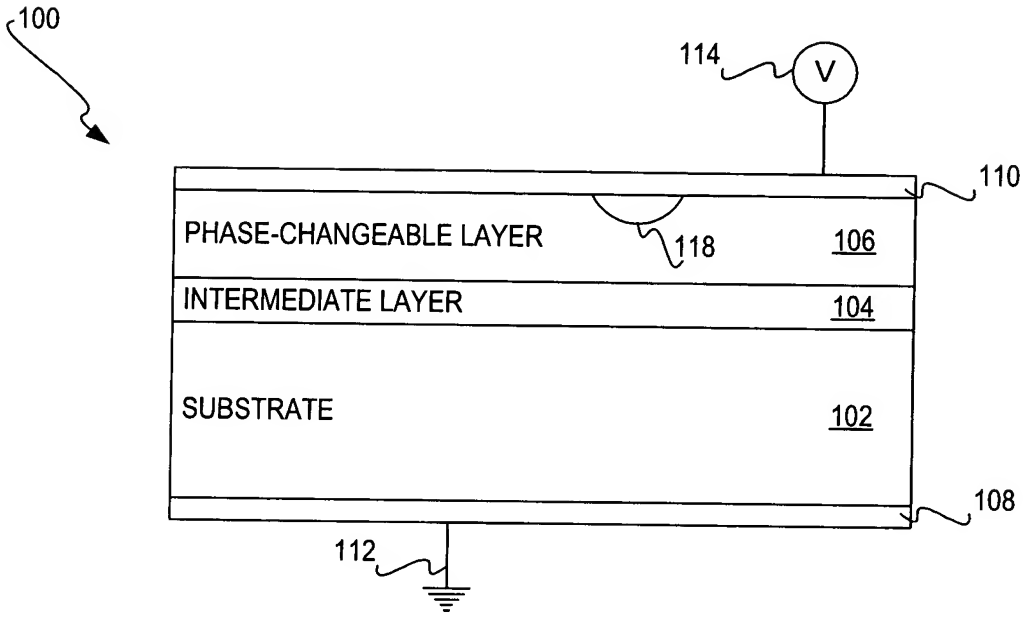

100
114
V
110
PHASE-CHANGEABLE LAYER
118
106
INTERMEDIATE LAYER
104
SUBSTRATE
102
108
112

FIG 2

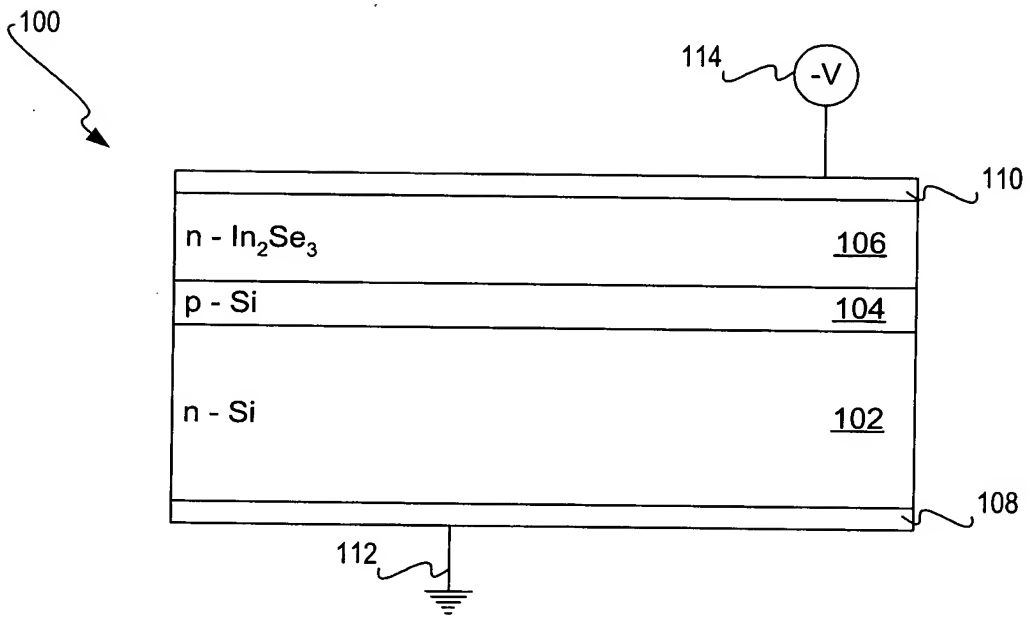


FIG 3A

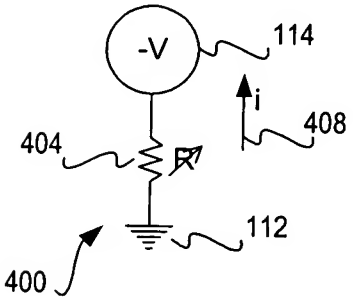


FIG 3B

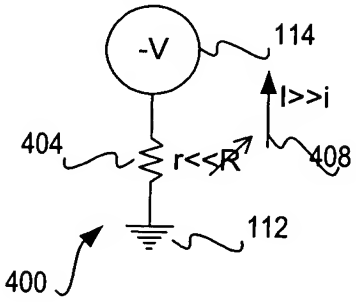
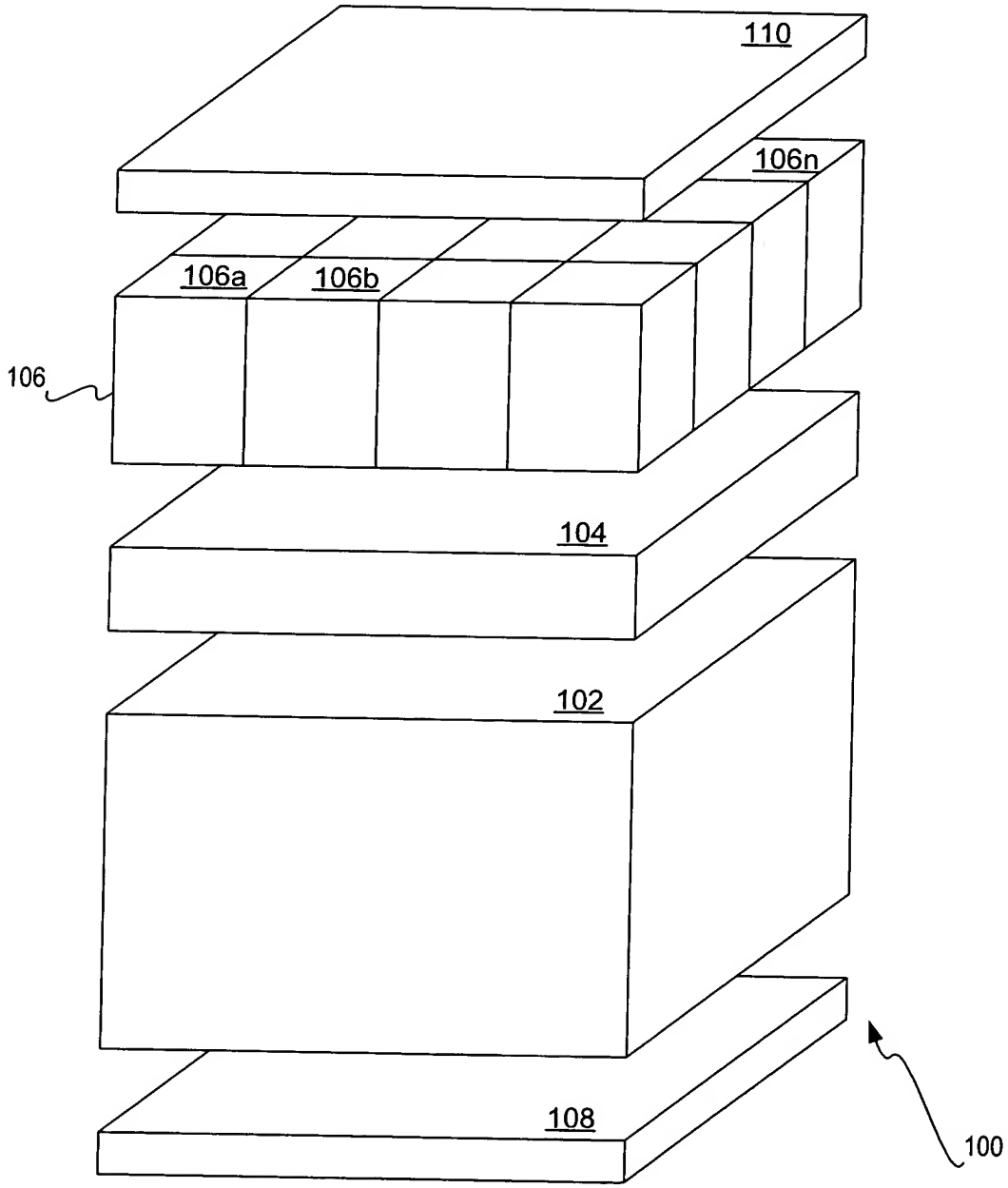


FIG 4



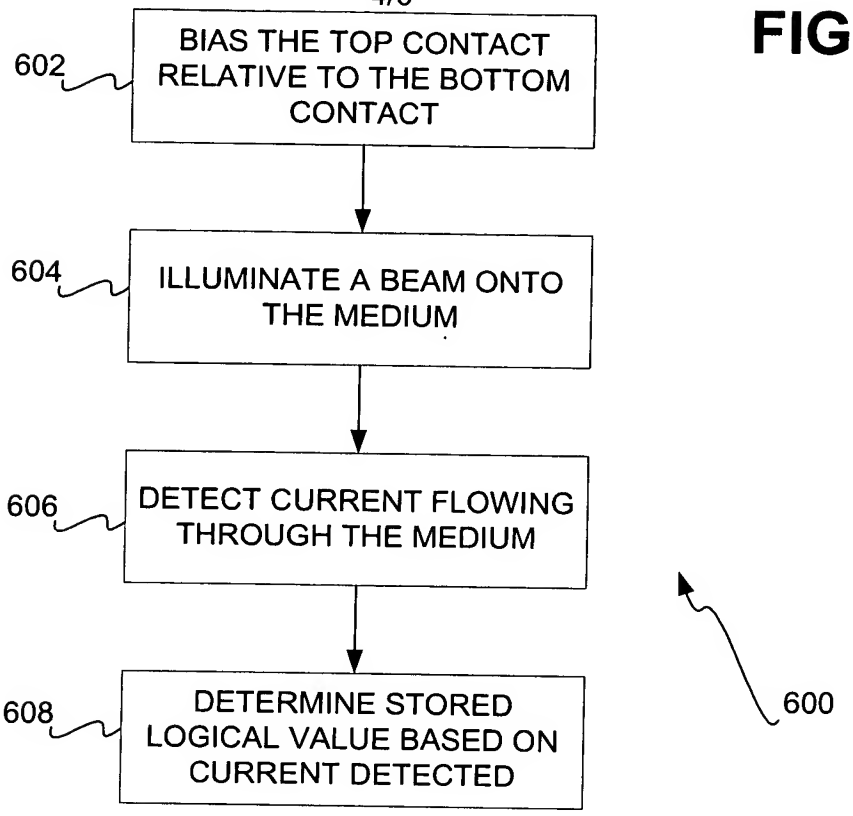

602
BIAS THE TOP CONTACT RELATIVE TO THE BOTTOM CONTACT
604
ILLUMINATE A BEAM ONTO THE MEDIUM
606
DETECT CURRENT FLOWING THROUGH THE MEDIUM
608
DETERMINE STORED LOGICAL VALUE BASED ON CURRENT DETECTED
600

FIG 5A

FIG 5B

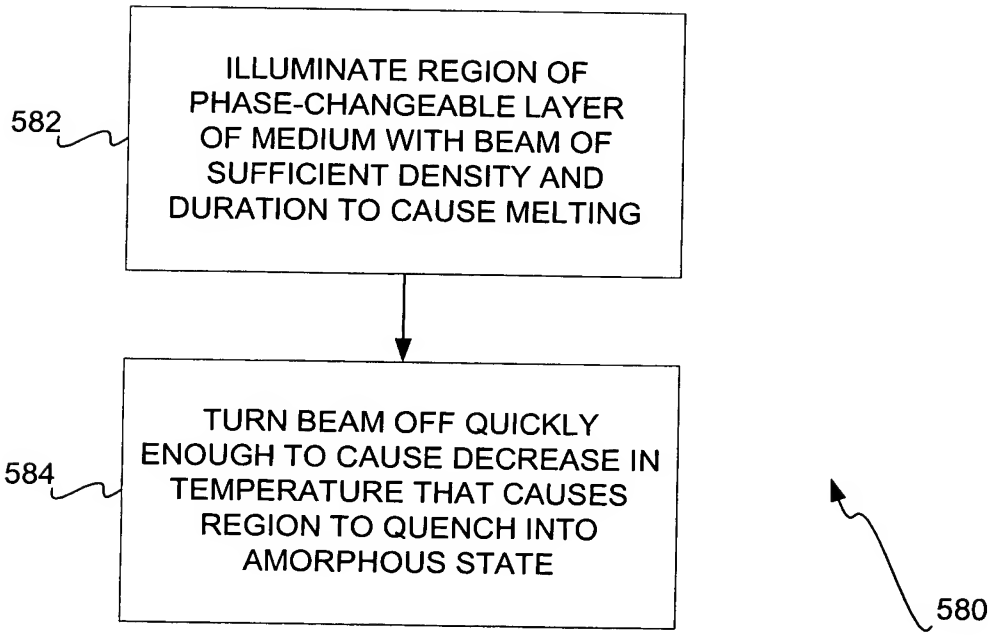

582
ILLUMINATE REGION OF PHASE-CHANGEABLE LAYER OF MEDIUM WITH BEAM OF SUFFICIENT DENSITY AND DURATION TO CAUSE MELTING
584
TURN BEAM OFF QUICKLY ENOUGH TO CAUSE DECREASE IN TEMPERATURE THAT CAUSES REGION TO QUENCH INTO AMORPHOUS STATE
580

FIG 5C

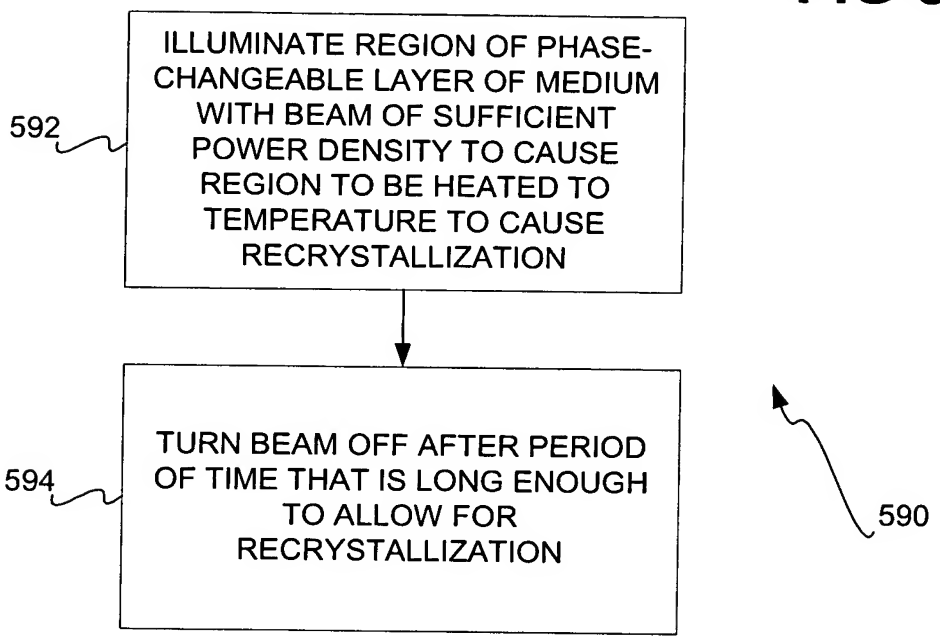

ILLUMINATE REGION OF PHASE-CHANGEABLE LAYER OF MEDIUM WITH BEAM OF SUFFICIENT POWER DENSITY TO CAUSE REGION TO BE HEATED TO TEMPERATURE TO CAUSE RECRYSTALLIZATION
592
TURN BEAM OFF AFTER PERIOD OF TIME THAT IS LONG ENOUGH TO ALLOW FOR RECRYSTALLIZATION
594
590

FIG 6

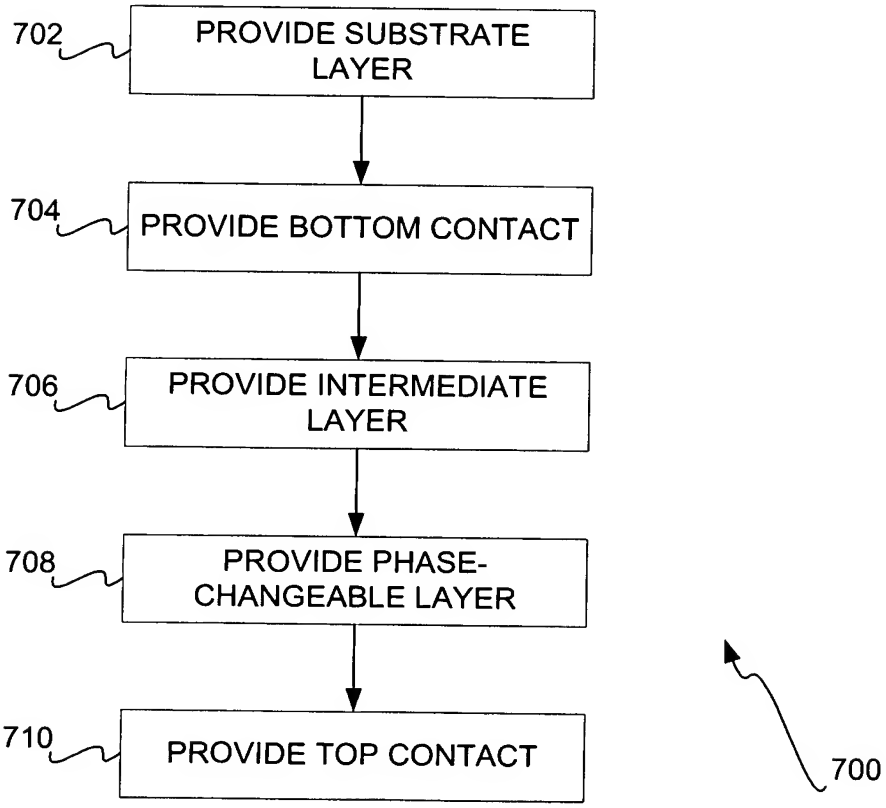
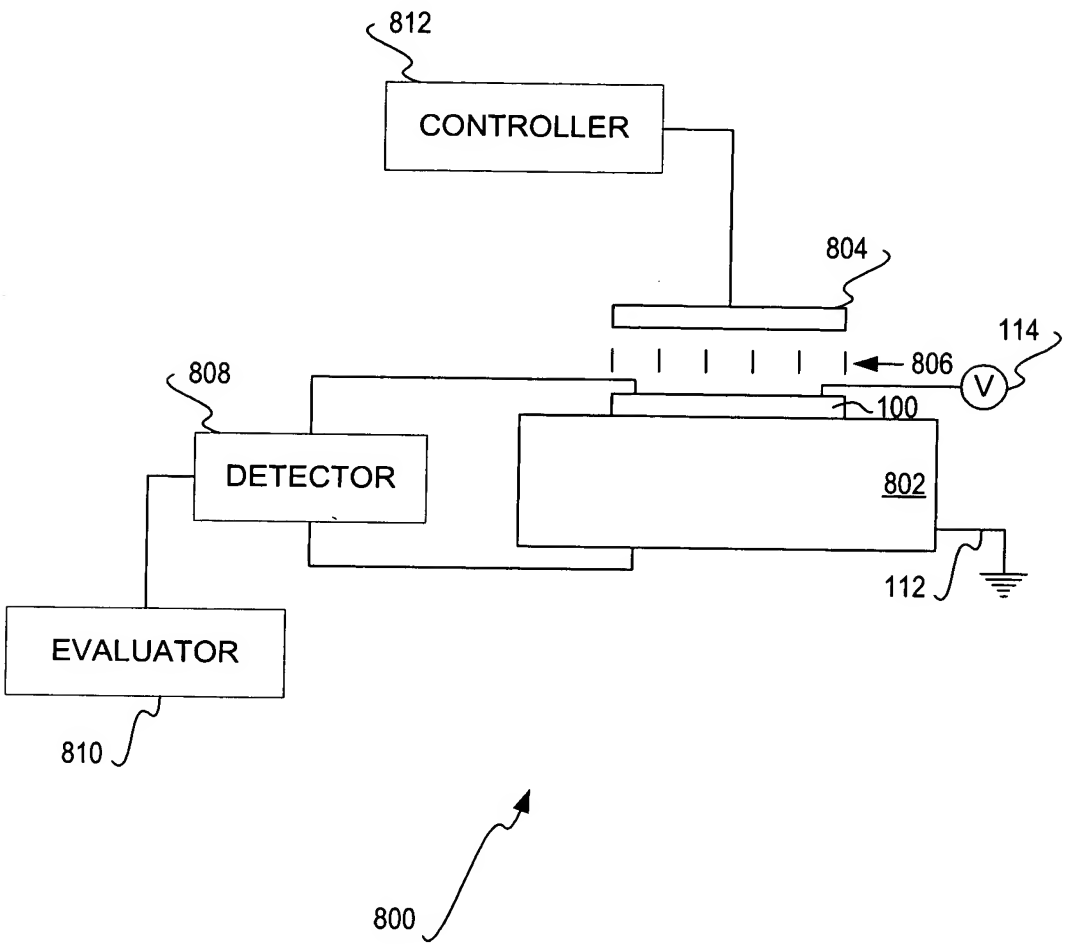

702
PROVIDE SUBSTRATE LAYER
704
PROVIDE BOTTOM CONTACT
706
PROVIDE INTERMEDIATE LAYER
708
PROVIDE PHASE-CHANGEABLE LAYER
710
PROVIDE TOP CONTACT
700

FIG 7


812
CONTROLLER
804
114
806
V
808
100
DETECTOR
802
112
EVALUATOR
810
800